

# WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 1: 30 December 2017 - 5 January 2018  
Data as reported by 17:00; 5 January 2018



**3**

New events

**50**

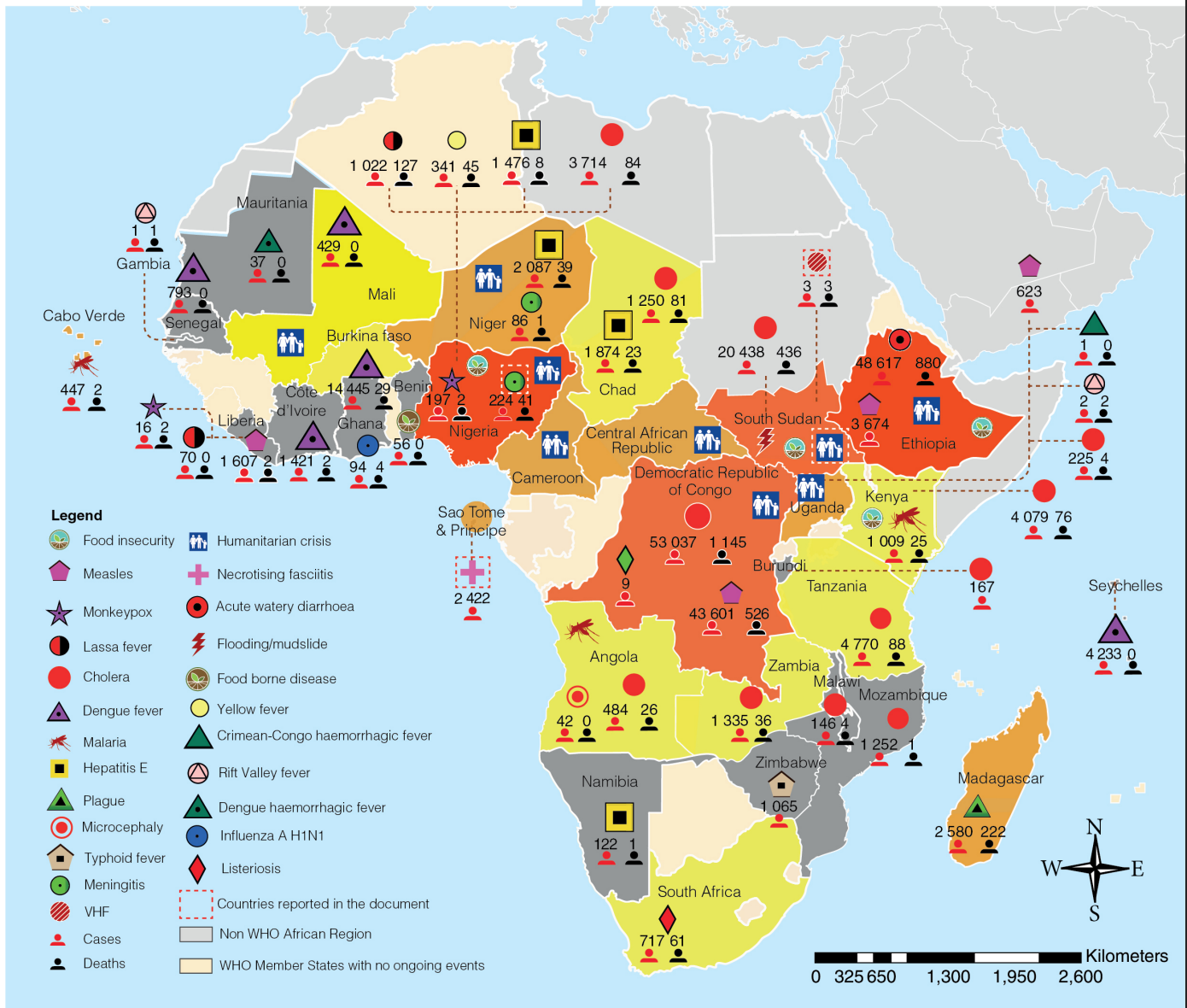
Ongoing events

**44**

Outbreaks

**9**

Humanitarian crises



**2**

Grade 3 events

**6**

Grade 2 events

**8**

Grade 1 events

**34**

Ungraded events

**2**

Protracted 3 events

**0**

Protracted 2 events

**1**

Protracted 1 event

# Overview

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- 7 All events currently being monitored

- This Weekly Bulletin focuses on selected acute public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 53 events in the region. This week's edition covers key new and ongoing events, including:
  - [Suspected viral haemorrhagic fever in South Sudan](#)
  - [Meningitis in Nigeria](#)
  - [Necrotizing fasciitis in São Tomé and Príncipe](#)
  - [Humanitarian crisis in South Sudan](#)
- For each of these events, a brief description followed by public health measures implemented and an interpretation of the situation is provided.
- A table is provided at the end of the bulletin with information on all new and ongoing public health events currently being monitored in the region, as well as events that have recently been closed.
- **Major challenges include:**
  - The outbreak of suspected viral haemorrhagic fever in South Sudan is concerning and more information on suspected cases is critical to inform response efforts. Strengthened surveillance and enhancement of case management capacity including infection prevention and control are urgently needed to facilitate rapid detection and treatment of future suspected cases. In addition, the shipment of samples to a reference laboratory in the region is required for confirmation of the event.
  - Despite enhanced preparedness measures, a new outbreak of meningitis has occurred in Nigeria and requires adequate control measures. Considerable challenges to the effective implementation of national and state response plans remain, and national and international partners will need to quickly scale up their interventions to effectively control the outbreak and reduce associated mortality.

# New events

Suspected viral haemorrhagic fever

South Sudan

3  
Cases

3  
Deaths

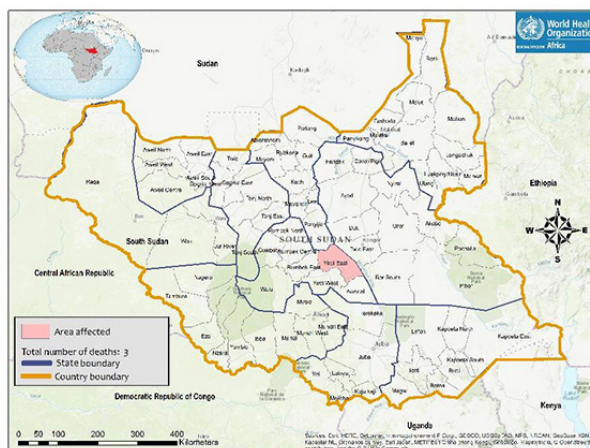
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CFR

## EVENT DESCRIPTION

On 28 December 2017, a cluster of three suspected viral haemorrhagic fever cases from Yirol East county, in the Eastern Lakes State, was reported to the National Ministry of Health and WHO. The putative index case was a 30 year-old pregnant female who became ill on 7 December 2017 with fever, headache, neck pain, and sudden nose, gum, and injection site bleeding. She was admitted to a health facility the same day and was transferred to a private clinic 8 days later after no improvement in symptoms. She was treated at the clinic for malaria and typhoid fever over 4 days and died at home on 19 December 2017 after her symptoms worsened. The second case, a 13 year-old female from the same village as the first case, became ill on 20 December 2017 with headache, joint and neck pain, fever, generalized swelling of the joints, and bleeding from the nose and gums. She died at home on 26 December 2017 after developing bleeding from skin blisters. The third case, a 15 year-old male from the same village as the first two cases, became ill on 24 December 2017 with headache, fever, sweating, neck pain, nose and gum bleeding, vomiting of blood, convulsions, and loss of consciousness. He died at home on 27 December 2017 after failing to respond to treatment at a private clinic.

A preliminary investigation conducted by the county, state, and national Ministries of Health, Doctors with Africa (CUAMM), and WHO found that all patients were epidemiologically linked by time (onset of illness between weeks 49 and 51) and place (residence in the same village). There was no history of close physical contact between the cases and no cases had a notable travel history. No samples were collected from the cases and supervised burials were not performed. No symptoms were reported among the close contacts of the cases during the course of their clinical illnesses or since their deaths. Sixty contacts were identified and are being followed up by a surveillance team comprised of Ministry of Health and WHO staff. The investigation found evidence of zoonotic haemorrhagic illness, including two abortions among goats and sheep, and eight goat deaths with evidence of extensive hemorrhage, and one ill cow. Deaths among wild birds were also reported during the time that the cluster of cases was detected.

Geographical distribution of suspected viral haemorrhagic fever cases in South Sudan, 7 December 2017 – 2 January 2018



## PUBLIC HEALTH ACTIONS

- ▶ National and state multi-sectoral taskforces have been activated to coordinate investigations and response activities.
- ▶ National and state rapid response teams have been deployed to conduct epidemiological and laboratory investigations of the cases. This includes active case finding, sample collection and monitoring of contacts, and training of health workers in case identification, infection prevention and control, and provision of supportive care.
- ▶ The Ministry of Health has engaged the Ministry of Animal Health Resources and the Food and Agriculture Organization of the United Nations (FAO) to work with the national taskforce in conducting animal health investigations and implementing containment measures.
- ▶ An outbreak response plan is being developed to guide the investigation and response activities, including the mobilization of stakeholders and resources to control the outbreak. A multi-sectoral coordination mechanism is planned, including public health, animal health, entomological, and laboratory surveillance, a risk communication and social mobilization strategy, and case management including infection prevention and control guidance.

## SITUATION INTERPRETATION

The outbreak of suspected viral haemorrhagic fever in South Sudan could rapidly evolve, and critical information including laboratory confirmation of the etiology of disease is needed to direct response efforts. Strengthened surveillance in affected human and animal populations is needed to facilitate rapid detection of human and animal cases and response; strengthened capacity to clinically manage any new cases is also needed in the affected area.

### EVENT DESCRIPTION

From 1 September 2017 to 28 December 2017 a total of 224 suspected cases of cerebro-spinal meningitis have been reported from four states in Nigeria: Zamfara (164), Sokoto (16), Katsina (27) and Jigawa (17). There have been 41 deaths as of 29 December 2017 (case fatality rate 18.3%). Seven wards, spread across six Local Government Areas (LGAs) in Zamfara State have reached epidemic threshold.

A total of 81 samples have been laboratory tested out of which 46 (56.8%) were positive and 25 (54.3%) were positive for *Neisseria meningitidis* C. The most affected age group is 4-15 years, with a male to female ratio of 2:1.

### PUBLIC HEALTH ACTIONS

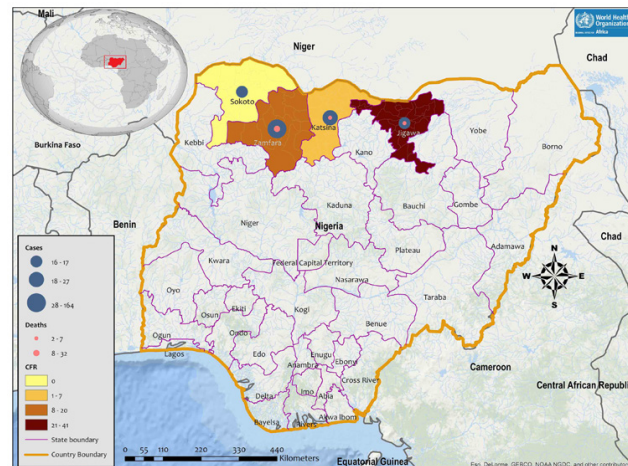
- A cerebro-spinal meningitis (CSM) outbreak risk assessment and preparedness plan was concluded in November 2017 by the Nigeria Centre for Disease Control (NCDC) and partners. NCDC and WHO further supported high priority states in developing state-specific plans and the CSM National Guideline was distributed to frontline users. A multi-agency CSM Emergency Operations Centre (EOC) was activated on 4 December 2017 to proactively coordinate the response.
- A quick reference guide for case management and for hospital and surveillance teams was developed and is currently under review. A letter of alert has been sent to all 36 states and the Federal Capital Territory (FCT).
- A rapid assessment of the situation in Zamfara State was conducted, leading to the deployment of a national rapid response team (RRT) within 24 hours of notification to support outbreak coordination, case management, risk communication and development of the International Coordinating Group on Vaccine Provision (ICG) request for a reactive vaccination campaign. On-the-job mentorship on treatment protocols is being provided for health facility staff.
- Essential commodities, including lumbar puncture kits, TI media and ceftriaxone have been deployed to Zamfara State.
- Twenty-one states have received training in culture and sample management and public health laboratories in four states have been supported with Pastorex, TI media, sample boxes and sheep blood. The laboratory capacity network for testing of samples is being mapped across the country.
- Surveillance data from reporting states is being collated and analyzed and all 36 states are being contacted to ensure receipt of updated epidemic data and to encourage states to intensify surveillance, with off-site surveillance support intensified in 11 high risk states and daily follow up of states reporting cases.
- A risk communication plan has been developed, and CSM infographics are being developed and disseminated via NCDC media platforms. Information, education and communication (IEC) materials have been prepositioned in 36 states and the FCT, and a public health advisory is being developed and disseminated. Educational audio jingles in local languages are currently being aired across high risk states.

### SITUATION INTERPRETATION

Nigeria falls in the meningitis belt, which experiences seasonal outbreaks of the disease during the dry season, from June to December. The last outbreak of cerebro-spinal meningitis in Nigeria was declared over on 23 June 2017, after 14 542 cases and 1 166 deaths (case fatality rate 8%). The After Action Review following this outbreak led to the formation of a national multi-agency Technical Working Group to enhance preparedness ahead of the next epidemic season. Given this, the upsurge in cases and the very high case fatality rate are of particular concern. Most high risk states have yet to implement their CSM preparedness and response plan. The most affected state, Zamfara, has a low sample collection rate, with resultant low testing, and some of the affected LGAs are inaccessible due to security issues. In addition, there are transport challenges due to fuel shortages across the country and inadequate and inconsistent data reported from some states.

In view of the potential for another major outbreak of this disease, there is an urgent need to intensify surveillance in affected states, support states to improve their sample collection rate and to deploy rapid response teams to more affected states. National and international partners need to upscale responses rapidly to prevent further spread of the disease.

Geographical distribution of meningitis cases in Nigeria, 1 September – 28 December 2017





# Ongoing events

Necrotizing fasciitis

São Tomé and Príncipe

2 472  
Cases

0  
Deaths

0%  
CFR

## EVENT DESCRIPTION

The outbreak of necrotizing fasciitis in São Tomé and Príncipe continues to evolve. Since the beginning of the outbreak in week 38 of 2016, a total of 2 472 cases have been reported, with all districts affected. No deaths have been reported as a direct result of the disease. In week 52 (ending 31 December 2017), a total of 27 new cases were reported from six of seven districts: Me-zochi (8), Agua Grande (6), Lembá (5), Lobata (4), Cantagalo (3), and Caue (1). Thirty-one cases are currently hospitalized; the current attack rate is 12.8 cases per 1 000 people. The incidence of necrotizing fasciitis increased slightly between weeks 29 and 34 and has plateaued, with a weekly average of 31 new cases reported since week 40. This remains significantly above the estimated non-outbreak incidence of fewer than 20 cases per month.

The highest attack rates have been reported from the districts of Caue, Cantagalo, and Lembá, with 29.6, 16.9, and 16.8 cases per 1 000 people, respectively. About half (49%) of the cases are age 35 years and older, and 56% are male. Investigations are ongoing to identify disease risk factors and the mode of disease transmission.

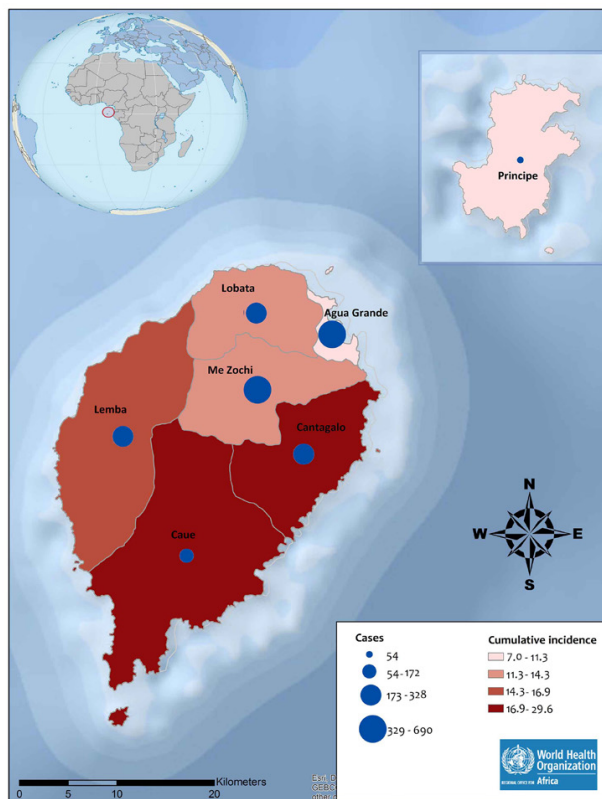
## PUBLIC HEALTH ACTIONS

- ▶ The Ministry of Health continues to coordinate the response, with participation by WHO.
- ▶ Two WHO epidemiologists have been requested by the Ministry of Health to support a case-control study on the island of Príncipe in January 2018.
- ▶ The Ministry of Health Department of surveillance continues to be strengthened, with support by WHO. Case follow up and classification are ongoing.
- ▶ Twenty-five Ministry of Health staff have been trained in Integrated Diseases Surveillance and Response (IDSR). Community health workers have also been trained to perform surveillance to facilitate rapid identification of cases.
- ▶ Smartphones are being used to transmit surveillance data, including images of case lesions, from districts. Geographic data of the location of cases is also being collected in some districts on the island of Príncipe to facilitate case mapping.
- ▶ A case management protocol has been developed and clinical staff have been trained in this.
- ▶ Visits to health facilities have been made to supervise ongoing surveillance and case management activities.
- ▶ Preparation for a case-control study on the island of Príncipe is ongoing.
- ▶ A communication plan has been developed to convey messages about risk factors and promote general hygiene.

## SITUATION INTERPRETATION

Although significant progress has been made by the Ministry of Health and partners in controlling this outbreak, its persistence demonstrates the need to scale up disease prevention and control measures. Important challenges are the lack of capacity for infection prevention and control in health facilities, surveillance, and laboratory diagnosis. Increased technical and material assistance is needed to continue to strengthen these activities. Additional funding may also be needed to scale up Ministry of Health and partners' ongoing response activities. Risk communication messages about appropriate wound care and the importance of seeking care at healthcare facilities should also be communicated in order to prevent disease.

Geographical distribution of necrotizing fasciitis cases in São Tomé and Príncipe, 25 September 2016 – 31 December 2017



### EVENT DESCRIPTION

Since the last report on this crisis in week 49 of 2017, a ceasefire between government and several armed groups was announced and took effect at 00:01 hours on Sunday 24 December 2017. However, there have been reports of continued clashes in Koch and Bieh (Unity state) as recently as 27 December 2017.

In the lead up to the ceasefire, continued conflict and displacement was reported from Greater Equatoria, Greater Upper Nile, and Greater Bahr El Ghazal. In Central Equatoria, a UN staff member was assaulted and detained in Yei on 16 December 2017, and on 18 December attacks in Lasu, Yei County, left a number of civilians dead and forced many others to flee to Uganda and Democratic Republic of the Congo. Many homes were looted and vandalized. In Eastern Equatoria, fire destroyed 92 homes in Ohilang village, Lopa County, leaving hundreds of people without shelter and other basic needs. In Jonglei, Greater Upper Nile, over 250 internally displaced people (IDPs) voluntarily left the Bor Protection of Civilians (POC) site and returned to Fangak, arriving on 17 December 2017. Intercommunal clashes over grazing between two groups

in Pariak Payam left several people wounded. In Unity, fighting on 24 December 2017 forced the relocation of 14 international NGO staff to Rumbek on the same day. The fighting left two civilians dead and many wounded and a humanitarian compound was looted and vandalized. Access to Koch is restricted until the situation improves. In Upper Nile, partners have reported increasing numbers of suicide cases, with two successful and five attempted in the week ending 30 December 2017. At least 15 000 people have returned to Tonga after fleeing fighting in the riverbank town, and partners are estimating the current population in need and possible interventions. On 22 December 2017 conflict erupted among groups in Cuebiet, Lakes, Greater Bahr El Ghazal, sparked by the declaration of a state of emergency and fears of imminent forced disarmament. As a result, partners have suspended activities in the area. Humanitarian activities have been suspended in Rumbek East, after intercommunal clashes retaliating for cattle raids left many dead.

The cholera outbreak continues to show a declining trend, with no active transmission in any of the 24 counties that confirmed the disease in 2017. The two confirmed cases reported in Juba in week 50 were consistent with sporadic transmission. Since the start of the current outbreak on 18 June 2016, a cumulative total of 20 438 cases and 436 deaths (case fatality rate 2.1%) have been reported.

### PUBLIC HEALTH ACTIONS

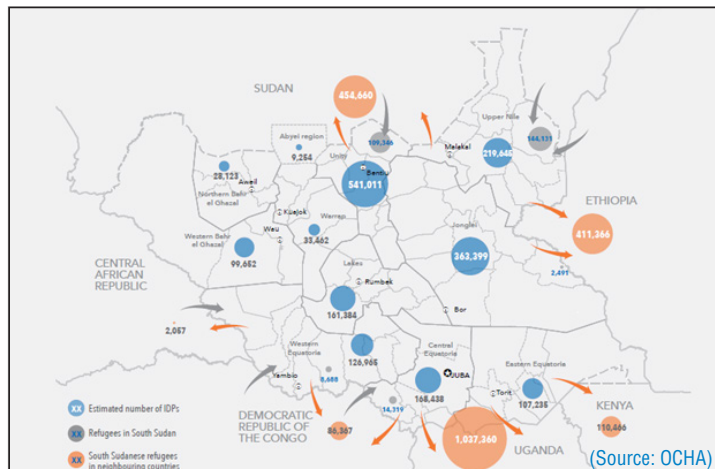
- WHO and health cluster partners have produced a draft humanitarian needs overview for 2018.
- The State Ministry of Health has asked partners to sign Memoranda of Understanding (MOUs) in Bentiu State. This is in addition to MOUs signed at national level with the Ministry of Health in Juba.
- On 26 December 2017, the Protection Cluster and partners met to discuss the trend of increasing suicides in Upper Nile and resolved that the assessment and investigations should be extended to Malakal town.
- The multi-sectoral response to the cholera outbreak continues, with coordination by the National Cholera Task Force, chaired by the Ministry of Health with support from WHO, UNICEF and water, hygiene and sanitation (WASH) cluster partners. Oral cholera vaccination campaigns continue.

### SITUATION INTERPRETATION

The current ceasefire has been called 'the last chance for the implementation of the peace process' by the United States and is an effort to salvage the 2015 peace deal. However, at the time of writing, ceasefire violations, by both government forces and armed groups, have already been reported.

South Sudan is entering its fifth year of humanitarian crisis, with an estimated 7.5 million people in need of assistance and rates of global acute malnutrition that have surpassed extreme levels in most assessed areas. The dry season is the period when intercommunal conflict and cattle rustling becomes more frequent, so heightened vigilance is required by national authorities to ensure that humanitarian partners are able to access populations in need. Global oversight is required to ensure that the fragile peace holds.

Humanitarian crisis in South Sudan as of November 2017



(Source: OCHA)

# Summary of major challenges and proposed actions

## Challenges

- ▶ Information from epidemiological, laboratory, and animal health investigations and surveillance is not currently available to inform response to the suspected viral haemorrhagic fever cases in South Sudan. The findings of these investigations are urgently needed to ensure that appropriate actions are taken to control this outbreak.
- ▶ Despite improved preparedness since the last dry season, a new outbreak of meningitis with a high case fatality rate has occurred in Nigeria. Particular attention should be paid to strengthening the case management capacity needed to address the high fatality rate associated with this event.

## Proposed actions

- ▶ The national authorities in South Sudan urgently need to strengthen human and animal surveillance for haemorrhagic disease and capacity to clinically manage future cases in the affected area. Continued technical and material support from animal health partners, WHO, and other responding organizations will likely be needed to bring this outbreak to a halt.
- ▶ National and international partners need to quickly scale up their response activities to prevent a meningitis outbreak of the magnitude observed in Nigeria in the first half of 2017. Response partners should prioritize addressing gaps in implementation of national and state preparedness response plans, including strengthening of case management, in states affected by the outbreak.

# All events currently being monitored by WHO AFRO

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
<b>New events</b>										
Nigeria	Meningitis	Ungraded	26-Dec-17	1-Sep-18	28-Dec-18	224	46	41	18.3%	Detailed update given above.
Gambia	Rift Valley fever (RVF)	Ungraded	3-Jan-17	25-Dec-17	3-Jan-18	1	1	1	100.0%	A 52 year-old man presenting with severe malaria was medically evacuated from the Gambia and hospitalized in Fann, Dakar. A blood sample collected from the case was positive for Rift Valley fever virus on IgM testing done at Institut Pasteur Dakar. The sample was negative for RVF and other arboviruses on PCR testing. An investigation is ongoing.
South Sudan	Suspected viral haemorrhagic fever (VHF)	Ungraded	28-Dec-17	7-Dec-17	2-Jan-18	3	-	3	100.0%	Detailed update given above.
<b>Ongoing events</b>										
Angola	Cholera	G1	15-Dec-16	13-Dec-16	3-Dec-17	484	-	26	5.4%	From 13 December 2016 to 03 December 2017, cases have been reported from Cabinda (236), Zaire (227), Luanda (5) and Uige (16) provinces. Two new cases (from Uige) were reported in week 48 (week ending 3 December 2017).
Angola	Malaria	Ungraded	20-Nov-17	n/a	30-Sep-17	-	-	-	-	The outbreak has been ongoing since the beginning of 2017. In the province of Benguela, a total of 311 661 malaria cases were reported from January to September 2017 as compared to 244 381 reported in all of 2016. In the province of Huambo, 155 311 malaria cases were reported from January to September 2017, as compared to 82 138 cases during the same period in 2016. Epidemiological investigations are ongoing in these two contiguous provinces.
Angola	Microcephaly - suspected Zika virus disease	Ungraded	10-Oct-17	End September	29-Nov-17	42	-	-	-	A cluster of microcephaly cases was detected in Luanda in late September 2017 and reported on 10 October 2017 by the provincial surveillance system. Of the 42 cases, three were stillbirths and 39 were live births. Suspected cases have been reported from Luanda province (39), Zaire province (1), Moxico province (1), and Benguela province (1).
Benin	Foodborne disease	Ungraded	29-Nov-17	27-Nov-17	1-Dec-17	56	-	0	0.0%	56 individuals residing in Sissèkpa became immediately ill with symptoms of vomiting after consuming a root vegetable locally known as "Léfé". Animals that were exposed to the vomit have reportedly died. The root vegetable has been collected for further analysis. Cases are currently under follow-up.
Burkina Faso	Dengue	G1	4-Oct-17	1-Jan-17	10-Dec-17	14 445	-	29	0.2%	Weekly case counts have decreased since week 44. The majority (62%) of cases have been reported in the central region, notably in Ouagadougou (the capital). Dengue virus serotypes 1, 2, and 3 are circulating, with serotype 2 predominating (72%).
Burundi	Cholera	Ungraded	20-Aug-17	15-Aug-17	6-Dec-17	167	14	0	0.0%	As of 6 December 2017, a cumulative total of 167 cases and no deaths were reported from 6 districts; DS Nyanza lac 30 cases, DS Mpanda 31 cases, DS Cibitoke 35 cases, DS Isare 33 cases, DS Buzanza 31 cases, and DS B M Nord 6 cases.



Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Cameroon	Humanitarian crisis	G2	31-Dec-13	27-Jun-17	3-Nov-17	-	-	-	-	In the beginning of November 2017, the general security situation in the Far North Region worsened. Terrorist attacks and suicide bombings are continuing and causing displacement. Almost 10% of the population of Cameroon, particularly in the Far North, North, Adamaoua, and East Regions, is in need of humanitarian assistance as a result of the insecurity. To date, more than 58 838 refugees from Nigeria are present in Minawao Camp, and more than 21 000 other refugees have been identified out of the camp. In addition, approximately 238 000 Internally Displaced People have been registered.
Cape Verde	Malaria	G2	26-Jul-17	1-Jan-17	20-Dec-17	447	-	2	0.4%	As of 20 December, a total of 447 cases have been reported including 418 indigenous, 12 imported cases, and 17 reinfections/recurrences. Two deaths have been reported (1 in an indigenous case and 1 in an imported case). The outbreak has been contained to the city of Praia. Cases reported from other areas/islands likely acquired the infection during travel to Praia or overseas, and there is currently no evidence of indigenous transmission outside of Praia.
Central African Republic	Humanitarian crisis	G2	11-Dec-13	11-Dec-13	11-Dec-17	-	-	-	-	The eastern part of the country currently has the greatest need for humanitarian assistance. There continue to be insecure zones that are left unserved by humanitarian actors and medical providers.
Chad	Hepatitis E	G1	20-Dec-16	1-Aug-16	3-Dec-17	1 874	98	23	1.2%	Outbreaks are ongoing in the Salamat Region predominantly affecting North and South Am Timan, Amsiné, Mouraye, Foulonga and Aboudeia. The number of cases has been decreasing since week 39. Of the 64 cases in pregnant women, five died (CFR: 7.8%) and 20 were hospitalized. Water chlorination activities were stopped at the end of September 2017 due to a lack of partners and financial means. Monitoring and case management are continuing.
Chad	Cholera	G1	19-Aug-17	14-Aug-17	10-Dec-17	1 250	9	81	6.5%	The case incidence has been decreasing since week 43. In week 49, no new cases were reported. A total of 817 cases and 29 deaths were reported in the Salamat region from 11 September 2017 to 10 December 2017. No new cases have been reported in the Sila Region since 22 October 2017.
Cote d'Ivoire	Dengue fever	Ungraded	3-May-17	22-Apr-17	16-Dec-17	1 421	322	2	0.1%	The outbreak has been on a downward trend since week 35, with no cases being reported in weeks 49 and 50. This is likely due to the decrease in rainfall. Abidjan remains the epicentre of this outbreak, accounting for 95% of the total reported cases. Of the 272 confirmed cases with available information on serotypes, 181 were dengue virus serotype 2 (DENV-2), 78 were DENV-3 and 13 were DENV-1. In addition, 50 samples were confirmed IgM positive by serology.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Democratic Republic of the Congo	Humanitarian crisis	G3	20-Dec-16	17-Apr-17	23-Dec-17	-	-	-	-	The humanitarian crisis remains serious. An estimated 8.5 million people are in need of emergency aid assistance, including around 4.1 million Internally Displaced Persons (IDPs), and 552 000 refugees. In addition, an estimated 7.7 million people are at risk of critical food insecurity. More than 74% of the country's total IDPs are from Kasai region and North, and South Kivu. Since the beginning of the year, the Kasai region recorded the largest movement of returns, with a total of 631 000 people, accounting for more than half of those initially displaced.
Democratic Republic of the Congo	Cholera		16-Jan-15	1-Jan-17	23-Dec-17	53 037	841	1 145	2.2%	The trend of the outbreak is improving. During week 50, a total of 939 suspected cases and 16 deaths (CFR: 1.7 %) were reported, compared to 1 129 suspected cases and 26 deaths (CFR: 2.3%) during week 49. This week, the provinces of South Kivu, Lualaba, Kasai, and central Kongo experienced an increase in the number of suspected cases compared to week 49.
Democratic Republic of the Congo	Measles		10-Jan-17	2-Jan-17	23-Dec-17	43 601	624	526	1.2%	The trend of the outbreak has decreased this week. During week 50, a total of 396 cases and 2 deaths (CFR: 0.5%) were reported, compared to 692 cases and 4 deaths (CFR: 0.6%) in week 49. Most of the suspected cases this week were reported from South Kivu province.
Ethiopia	Humanitarian crisis	Protracted 3	15-Nov-15	n/a	3-Dec-17	-	-	-	-	This complex emergency includes outbreaks (acute watery diarrhoea, measles, and acute jaundice syndrome), the severe drought across northern, eastern, and central Ethiopia, and high levels of food insecurity and malnutrition. An estimate of 8.5 million people are food-insecure and in need of humanitarian assistance. 6.3 million people are in need of health assistance and 0.4 million children are severely malnourished. Estimates of the number of internally displaced people range from 660 000 to 900 000. Over 889 071 refugees have left Ethiopia as a result of this crisis.
Ethiopia	Acute watery diarrhoea (AWD)		15-Nov-15	1-Jan-17	3-Dec-17	48 617	-	880	1.8%	The outbreak is showing a downward trend. Only 11 new cases have been reported this week from 4 regions: Amhara, Somali, Diridawa and B.Gumuz regions. Nine regions in Ethiopia have been affected, and 73.6% of the total cases are from Somali region.
Ethiopia	Measles		14-Jan-17	1-Jan-17	24-Nov-17	3 674	-	-	-	The outbreak of measles continues to improve. During week 47, 37 cases were reported from Dollo zone and Jijiga City. Oromia Region remains the most affected region with approximately 46% of the total reported cases, followed by Amhara (21 %), Addis Ababa (16 %) and Somali (20 %).
Ghana	Influenza A H1N1	Ungraded	6-Dec-17	30-Nov-17	14-Dec-17	94	0	4	4.2%	On 06 December 2017, the Ministry of Health notified WHO of a focal outbreak of influenza A H1N1 in a school in Kumasi City, Ashanti Region. As of 14 December 2017, 94 cases with four deaths (CFR: 4.2%) have been reported. Thus far, the disease is still localized in the school as no cases have been reported among community members.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Kenya	Cholera	G1	6-Mar-17	1-Jan-17	7-Dec-17	4 079	724	76	1.9%	The outbreak is still ongoing and 7 counties are actively reporting cases: Nairobi, Garissa, Mombasa, Wajir, Kwale, Embu, and Kirinyaga counties. Approximately 60% of the cases are reported from Nairobi county.
Kenya	Malaria	Ungraded	-	25-Sep-17	26-Oct-17	1 009	604	25	2.5%	The outbreak is affecting 3 wards in Marsabit, namely Durkana (598 cases), North Horr (236 cases) and Loiyangalani (175 cases) wards.
Liberia	Suspected monkeypox	Ungraded	14-Dec-17	1-Nov-16	14-Dec-17	16	0	2	12.5%	During weeks 48 and 49 of 2017, three suspected cases of monkeypox were reported from Maryland and Rivercess counties. Since November 2016, a cumulative of 16 suspected cases and two deaths have been reported in Grand Cape Mount(4), rivercess(11) and Maryland(1). No cases have been confirmed to date and laboratory confirmation is ongoing.
Liberia	Measles	Ungraded	24-Sep-17	6-Sep-17	3-Dec-17	1 607	255	2	0.1%	From week 1 to week 48, 1 607 cases were reported from 15 counties, including 225 laboratory confirmed, 336 clinically compatible and 199 epi-linked. Nimba county has had the greatest cumulative number of cases to date (235). Children between 1-4 years accounted for 49% of the cases.
Liberia	Lassa fever	Ungraded	14-Nov-17	3-Nov-17	24-Nov-17	70	28	-	-	On 10 November 2017, four suspected cases of Lassa fever were reported from Phebe Hospital in Suakoko district, Bong County. One of the cases tested positive by RT-PCR and the other three tested negative. Since the beginning of 2017, a total of 70 suspected Lassa fever cases including 21 deaths (CFR: 30%) have been reported from nine counties in Liberia.
Madagascar	Plague	G2	13-Sep-17	13-Sep-17	17-Dec-17	2 580	521	222	8.6%	Cases include pneumonic (1 989, 77%), bubonic (381, 15%), septicaemic (1) and unspecified (209, 8%) forms of disease. Of the 1 989 clinical cases of pneumonic plague, 395 (20%) have been confirmed, 629 (32%) are probable and 965 (49%) remain suspected.
Malawi	Cholera	Ungraded	28-Nov-17	20-Nov-17	31-Dec-17	146	5	4	2.7%	As of 31 December 2017, 4 districts had reported cholera cases: Karonga, Nkhatabay, Kasungu and Dowa. Karonga is the worst affected district, accounting for 87% of all reported cases. Kasungu and Dowa have not reported cases in the past 2 weeks.
Mali	Dengue fever	Ungraded	4-Sep-17	1-Aug-17	10-Dec-17	429	33	0	0.0%	In week 49, no suspected cases were reported. No confirmed cases have been reported since week 41. All cases have been reported from Bamako and the Kati health district northwest of Bamako.
Mali	Humanitarian crisis	Protracted 1	n/a	n/a	19-Nov-17	-	-	-	-	The security situation remains volatile in the north and centre of the country. At the last update, incidents of violence had been perpetrated against civilians, humanitarian workers, and political-administrative authorities.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Mauritania	Dengue haemorrhagic fever	Ungraded	30-Nov-17	6-Dec-17	13-Dec-17	37	37	-	-	On 30 November 2017, the MoH notified 3 cases of dengue fever including one hemorrhagic case (Dengue virus type 2) with history of Dengue virus type 1 infection in 2016. Out of 100 samples collected at the Teyarett health centre, 83 cases tested positive for dengue on RDT. On 12 December, the national reference laboratory confirmed the diagnosis of 37 out of 49 RDT positive samples collected between 16 November 2017 and 11 December 2017.
Mozambique	Cholera	Ungraded	27-Oct-17	12-Aug-17	15-Dec-17	1 252	-	1	0.1%	The cholera outbreak is ongoing. Cases have been reported from three districts (Memba, Erati, and Nacoroa) in Namapula province. The outbreak started in mid-August 2017 from Memba district. Erati district started reporting cases from week 41 and Nacoroa started reporting cases from week 42.
Namibia	Hepatitis E	Ungraded	18-Dec-17	14-Dec-17	29-Dec-18	122	18	1	0.8%	Between week 41, 2017 and week 52, 2017, a total of 122 probable and confirmed cases have been seen at various health facilities in Windhoek district with signs and symptoms of Hepatitis E. More than 75% of the cases are from Havana and Goreang ab Dam, which are informal settlements within the capital district.
Niger	Humanitarian crisis	G2	1-Feb-15	1-Feb-15	11-Aug-17	-	-	-	-	The security situation remains precarious and unpredictable. On 28 June 2017, 16 000 people were displaced after a suicide attack on an internally displaced persons camp in Kablewa. In another attack on 2 July 2017, 39 people from Ngalewa village, many of them children, were abducted. The onset of the rainy season is impeding the movements of armed forces around the region.
Niger	Meningitis	Ungraded	-	29-Sep-17	9-Dec-17	86	11	1	1.2%	In week 49, 2 districts in Niger's Zinder region have crossed the epidemic threshold: Mirriah and Magaria. Between week 39 (start of the epidemic season) and week 49, a cumulative total of 86 suspected and confirmed cases including 1 death, were reported. The main affected regions include: Mirriah (47 cases and 1 death), Magaria (12 cases), Tahoua (8 cases) and Madaoua (6 cases). <i>Neisseria meningitidis</i> sero-group C was confirmed by PCR in 11 isolates.
Niger	Hepatitis E	Ungraded	2-Apr-17	2-Jan-17	19-Nov-17	2 078	439	39	1.9%	The outbreak continues to improve. The majority of cases have been reported from Diffa, N'Guigmi, and Bosso health districts. Case incidence continues to decline; 11 suspected cases have been reported in week 46. There are no cases reported since week 46 of 2017.
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	17-Dec-17	-	-	-	-	The protracted conflict has resulted in widespread population displacement, restricted access to basic social services, including healthcare and protection needs, and a deepening humanitarian crisis. An estimated 8.5 million people have been affected and are in need of life-saving assistance, including 1.7 million IDPs.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Cholera (nationwide)	Ungraded	7-Jun-17	1-Jan-17	10-Dec-17	3 714	43	84	2.3%	Between weeks 1 and 49, 3 714 cases were reported from 20 states compared to 727 suspected cases from 14 states during the same period in 2016. The cumulative total of cases and deaths in 2017 surpasses that observed during the same period in 2016 (727 suspected cases, 32 deaths).
Nigeria	Lassa fever	Ungraded	24-Mar-15	1-Dec-16	24-Dec-17	1 022	308	127	12.4%	The outbreak is currently active in six states: Ondo, Edo, Plateau, Bauchi, Kaduna, and Nasarawa). In Week 51, eight new confirmed cases were reported from Ondo (6), Edo (1) and Nasarawa (1) states.
Nigeria	Hepatitis E	Ungraded	18-Jun-17	1-May-17	9-Dec-17	1 476	182	8	0.6%	The number of cases has been decreasing since week 47. Nineteen new cases were reported in Kala/Balge (18) and Monguno (1) LGAs in week 49 (ending 09 December 2017).
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	19-Dec-17	341	32	45	13.2%	A total of 341 suspected cases have been reported from sixteen states: Abia, Borno, Kogi, Kwara, Kebbi, Plateau, Zamfara, Enugu, Oyo, Anambra, Edo, Lagos, Kano, Nasarawa, Katsina, and Niger. Thirty-two cases from six states (Kano, Kebbi, Kogi, Kwara, Nasarawa, and Zamfara) have been laboratory-confirmed at IP Dakar.
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	22-Dec-17	197	68	2	1.0%	Suspected cases are geographically spread across 22 states and the Federal Capital Territory (FCT). Sixty-eight laboratory-confirmed cases have been reported from 14 states/territories (Akwa Ibom, Abia, Bayelsa, Benue, Cross River, Delta, Edo, Ekiti, Enugu, Lagos, Imo, Nasarawa, Rivers and FCT).
São Tomé and Príncipe	Necrotising cellulitis/fasciitis	G2	10-Jan-17	25-Sep-16	17-Dec-17	2 422	0	0	0.0%	Detailed update given above.
Senegal	Dengue fever	Ungraded	30-10-2017	28-09-2017	24-Dec-17	793	136	0	-	Since 28 September 2017, the date of confirmation of the first cases of dengue fever, 136 cases were confirmed from the Louga region (128), Fatick (2), Thiès (1), and Dakar (5). Analyses by Institut Pasteur Dakar have shown that Dengue virus type 1 (DENV-1) is the only serotype circulating. No severe cases and no deaths have been reported.
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	28-Nov-17	4 233	1 429	-	-	As of 28 November 2017, 4 233 cases have been reported from all regions of the three main islands (Mahé, Praslin and La Digue). The trend in the number of cases has been decreasing since week 23.
South Africa	Listeriosis	G1	6-Dec-17	4-Dec-17	3-Jan-18	717	717	61	8.5%	Between 1 January 2017 and 3 January 2018, a total of 717 laboratory-confirmed listeriosis cases have been reported to the National Institute for Communicable Diseases (NICD). Most cases have been reported from Gauteng Province (61%), followed by Western Cape (13%) and KwaZulu-Natal (7%) provinces.
South Sudan	Humanitarian crisis	G3	15-Aug-16	n/a	15-Dec-17	-	-	-	-	Detailed update given above.
South Sudan	Cholera	Ungraded	25-Aug-16	18-Jun-17	29-Dec-18	20 438	512	436	2.2%	Cholera transmission continues to decline nationally. Since week 47, the outbreak has been localized in two counties (Juba and Budi), and no new cholera cases were reported during week 52, 2017. The last case in Budi was reported in week 47, 2017 and the last case reported from Juba was in week 50, 2017.



Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Tanzania	Cholera	G1	20-Aug-15	1-Jan-17	24-Dec-17	4 770	-	88	1.8%	In week 52, a total 215 with 11 deaths (CFR: 5.1%) have been reported compared to 175 cases with 5 deaths (2.9%) in week 51. This week, cases have been reported from seven regions: Kigoma (157 cases), Rukwa (28 cases), Dodoma (13 cases), Songwe (10 cases), Ruvuma (three cases), Manyara (two cases) and Tanga (two cases).
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	1-Dec-17	-	-	-	-	The influx of refugees to Uganda has continued as the security situation in the neighbouring countries remains fragile. According to UNHCR, the total number of registered refugees and asylum seekers in Uganda stands at 1 398 991, as of 1 December 2017. More than 75% of the refugees are from South Sudan and 16.6% are from DR Congo.
Uganda	Measles	Ungraded	8-Aug-17	24-Apr-17	3-Oct-17	623	34	-	-	The outbreak is occurring in two urban districts: Kampala (310 cases) and Wakiso (313 cases).
Uganda	Cholera	Ungraded	28-Sep-17	25-Sep-17	29-Nov-17	225	17	4	1.8%	The outbreak in Kasese District is still ongoing. The number of sub-counties affected by this outbreak has continued to rise and has now reached twelve sub-counties. Nyakiyumbu sub County remains the most affected in the district. Another outbreak was identified in Kisoro district. So far, three cases were admitted, including 1 confirmed.
Uganda	Rift Valley fever (RVF)	Ungraded	22-Nov-17	14-Nov-17	14-Dec-17	2	2	2	100.0%	On 21 November 2017, the Uganda Virus Research Institute (UVRI) alerted the MoH of a confirmed and fatal case of Rift Valley Fever (RVF) in Kiboga district. On 23 November, a second confirmed and fatal case of RVF was reported in Mityana district. Prior to falling ill, both cases had contact with sick animals that died in previous weeks. As of 14 December 2017 no additional cases have been detected through ongoing enhanced surveillance.
Uganda	Crimean-Congo haemorrhagic fever (CCHF)	Ungraded	27-Dec-17	23-Dec-17	27-Dec-17	1	1	-	-	A 9 year-old male presented to the hospital in Nakaseke District, Uganda with vomiting, nausea, diarrhoea, general weakness, anorexia, abdominal pain, and headache. He also reported having blood in stool and haematemesis. A whole blood sample was collected on 23 December 2017 and sent to Uganda Virus Research Institute (UVRI), and tested positive for CCHF on PCR. An epidemiological investigation is ongoing to identify contacts and similar cases.
Zambia	Cholera	G1	4-Oct-17	4-Oct-17	26-Dec-17	1 335	238	36	2.7%	On 26 December 2017, 53 new cases with one death were reported in Lusaka district, with the Chipata area accounting for 45% (N=24) of new cases. Since the beginning of the outbreak, Lusaka district reported a total of 1 317 cases with 36 deaths (CFR: 2.7%). An additional 18 cases with 1 death were reported from other districts in the province: Chongwe (5), Kapiri Mposhi (3), Ndola (2), Shibuyunji (6), Kaoma (1) and Rufunsa (1). To date <i>Vibrio cholerae</i> was isolated from 93 specimens.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Zimbabwe	Typhoid fever	Ungraded	-	1-Oct-17	19-Nov-17	1 065	82	-	-	On 17 October, a confirmed case of typhoid fever was reported from Matapi area of Mbare in Harare. As of 19 November, the outbreak has spread from its epicentre in Matapi to other suburbs in Harare and areas outside of Harare.
<b>Recently closed events</b>										
Mauritania	Crimean-Congo haemorrhagic fever (CCHF)	Ungraded	20-Nov-17	11-Nov-17	5-Jan-18	1	1	0	0.0%	42 days have passed since the confirmation of the only case on 20 November. All listed contacts have completed the follow-up and no additional cases has been detected.
Zambia	Anthrax	Ungraded	22-Nov-17	29-Sep-17	28-Nov-17	46	6	1	2.2%	As of 28 November 2017, no new cases have been reported. Since the beginning of the outbreak 3 districts had been affected in the Western Province: Nalolo, Sioma and Shangombo. Both human samples and samples from dead bovine carcasses had tested positive for <i>Bacillus Anthracis</i> .

†Grading is an internal WHO process, based on the Emergency Response Framework. For further information, please see the Emergency Response Framework: <http://www.who.int/hac/about/erf/en/>.

Data are taken from the most recently available situation reports sent to WHO AFRO. Numbers are subject to change as the situations are dynamic.

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Correspondence on this publication may be directed to:

Dr Benido Impouma  
Programme Area Manager, Health Information & Risk Assessment  
WHO Health Emergencies Programme  
WHO Regional Office for Africa  
P O Box. 06 Cité du Djoué, Brazzaville, Congo  
Email: afrooutbreak@who.int

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#### **Contributors**

G. Guyo (South Sudan)  
I. Okudo (Nigeria)  
V. Santana Gil (São Tomé and Príncipe)

#### **Graphic design**

Mr. A. Moussongo

#### **Editorial Team**

Dr. B. Impouma  
Dr. C. Okot  
Dr. E. Hamblion  
Dr. B. Farham  
Dr. V. Sodjinou  
Ms. C. Machingaidze  
Mr. R. Ibrahim  
Dr. P. Ndumbi  
Dr. K. Heitzinger  
Dr. S. Funke

#### **Production Team**

Mr. A. Bukhari  
Mr. T. Mlanda  
Mr. C. Massidi

#### **Editorial Advisory Group**

Dr. I. Soce-Fall, *Regional Emergency Director*  
Dr. B. Impouma  
Dr. Z. Yoti  
Dr. Y. Ali Ahmed  
Dr. M. Yao  
Dr. M. Djingarey

#### **Data sources**

Data is provided by Member States through WHO Country Offices via regular situation reports, teleconferences and email exchanges. Situations are evolving and dynamic therefore numbers stated are subject to change.